

ABSTRACT OF THE DISCLOSURE

A polarity exchanger and ion implanter include a stripping canal for passing an ion beam therethrough, a gas supply unit for providing a stripping gas into the stripping canal to change a polarity of the ion beam, a gas circulation unit for circulating the stripping gas, a flow meter for measuring a flow rate of the stripping gas, an ammeter for measuring a driving current applied to the gas circulation unit for operating the gas circulation unit, and a monitoring unit for generating a control signal to control a process for changing the polarity of the ion beam in accordance with the measured flow rate of the stripping gas and the measured driving current. The polarity exchanger and ion implanter having the polarity exchanger may prevent generation of metallic contaminants caused by a flow rate variation of the stripping gas or deterioration of a component of the gas circulation unit.